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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,303	01/29/2007	Philip Head	23639	4172

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EXAMINER	
ANDREWS, MICHAEL	
ART UNIT	PAPER NUMBER
2834	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,303	HEAD, PHILIP	
	Examiner	Art Unit	
	MICHAEL ANDREWS	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 July 2009* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is responsive to the Applicant's communication filed July 6, 2009. In virtue of this communication, claims 1-6 are pending in the instant application.

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

It should be noted that the Applicant makes no argument as to the second reference, Owada, or to the combination of references. The Applicant has stated that the first applied reference, Hsia, is for a different application, but a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended claim 1 recites "impermeable and

coaxial inner and outer tubes" in lines 3 and 4. This constitutes new matter as the original disclosure only contained one "impermeable tube 49", disclosed on line 11 of [0030] of the original specification.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Owada et al. (US 4,329,122), hereinafter referred to as "Owada", in view of Hsia (US 5,394,043).

With regard to claim 1, Owada discloses an electric motor [100] (see figure 5) for powering downhole tools in a wellbore (see col. 1, lines 9-17), the motor comprising:

impermeable and coaxial inner [105] and outer [102] tubes in contact with wellbore fluids and forming an axially extending annular space sealed from the wellbore fluids (see col. 4, lines 50-56);

a stator [101] having in the space a series of coiled windings and laminations connectable to a power supply (see col. 4, lines 45-49; the laminations are clearly visible in the figure; and connection to a power supply is inherent in this type of device);

a rotor [106] connectable to a rotatable device[107] (see col. 4, lines 61-62), forming an axially through-going flowpath-forming passage (clearly shown in figure 5

between the rotor and stator), and the inner tube [105] in contact with the wellbore fluids (see col. 4, lines 50-56), the rotor [106] and the laminations of the stator [101] being arranged annularly with respect to each other (see figure 5);

except that Owada does not expressly disclose a permanent magnet rotor or a potting material in the space and impervious to wellbore fluids, the laminations and coil windings being potted in the material.

Hsia discloses an electric motor [10], the motor comprising:

a stator [20] (see col. 2, lines 19-20) having a series of coiled windings [22] and laminations [24] (see col. 2, lines 24-26) connectable to a power supply (see col. 3, lines 66-67 and col. 5, lines 5-9);

a rotor [30] (see col. 2, lines 28-30) connectable to a rotatable device [40] (see col. 2, lines 36-39), forming an axially through-going flowpath-forming passage [144], and including a permanent magnet [60] (see col. 2, lines 53-59), the permanent magnet of the rotor and the laminations of the stator being arranged annularly with respect to each other (see figure); and

a potting material [116] in the space and impervious to wellbore fluids (see col. 1, lines 60-64; A material capable of withstanding autoclaving conditions would easily withstand common wellbore fluids.), the laminations and coil windings being potted in the material (see col. 3, lines 62-66).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the electric motor of Owada by securing the laminations and coil windings in a potting material as taught by Hsia, for sealing all

electrical sections of the motor, since Hsia teaches that encapsulating the coil structure allows such a motor to withstand high heat and pressure conditions (see col.1, lines 60-65).

With regard to claim 2, the combination of Owada and Hsia discloses an electric motor according to claim 1, as stated above. The combination, however, does not explicitly teach that the potting material is introduced under a vacuum. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the potting material under a vacuum, since the potting material is a finished product which can be made by any process, and the product itself is the same as or obvious over the product of the prior art. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

With regard to claim 3, the combination of Owada and Hsia discloses an electric motor according to claim 1, as stated above, further comprising a motor housing [12] which confines the potting material (Figure 1 of Hsia shows the potting material [116] completely encapsulated by the motor housing [12].).

With regard to claim 4, the combination of Owada and Hsia discloses an electric motor according to claim 1, as stated above, further comprising:

wiring [100,106] that exits from the potted material through a metal clad tube [92] (see col. 3, lines 57-61 of Hsia), onto which an O-ring seal can be used (Statements of intended use do not further limit the scope of the claim.).

With regard to claim 5, the combination of Owada and Hsia discloses an electric motor according to claim 1, as stated above, wherein two or more electric motors [100, 200, 300] are secured in series to comprise an electric motor assembly [10b] (see col. 8, lines 22-25 of Owada).

With regard to claim 6, the combination of Owada and Hsia discloses an electric motor assembly according to claim 5, as stated above. The combination, however does not explicitly teach that the motors are secured together before the potting material is introduced. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the motor assembly by securing the motors together before the potting material is introduced, since the motor assembly is a finished product which can be made by any process, and the product itself is the same as or obvious over the product of the prior art. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Andrews whose telephone number is (571)270-7554. The examiner can normally be reached on Monday through Thursday between the hours of 7:30 and 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quyen Leung can be reached at (571)272-8188. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quyen Leung/
Supervisory Patent Examiner, Art Unit 2834

/M. A./
Examiner, Art Unit 2834